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10/568,416

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EXAMINER

JOSEPH, DENNIS P

ART UNIT

PAPER NUMBER

2629

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/568,416

**Applicant(s)**

MURAKAMI, SEIICHI

**Examiner**

DENNIS P. JOSEPH

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

1. This Office Action is responsive to amendments filed for No. 10/568,416 on February 11, 2010. Claims 1-11 are pending and have been examined.

***Drawings***

2. **Figure 7** should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. The background of the invention and the description of the figures refer to this as conventional art, so it should be labeled as such. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. **Claims 1-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yukio ( JP 2002-259054 ) in view of Takashi (JP- 2000187237). Please note the Yukio reference is an art described in the background of the present invention and is described in Figure 7.

Yukio teaches in Claim 1:

A transparent touch panel comprising:

a transparent first substrate ( **Drawing 2, substrate 130, [0017] discloses a glass material** ) and a second substrate ( **Drawing 2, substrate 110** ) each having a transparent electro-conductive layer on one surface thereof ( **Drawing 2, [0016]-[0017] shows electro-conductive layers 111 and 131** ), the transparent first substrate and the second substrate being arranged with a predetermined interval between each other in such a manner that the transparent electro-conductive layers are facing each other ( **Drawing 2 shows the interval between them. Also please note spacers 160** ), each transparent electro-conductive layer including a respective pair of electrodes disposed on each end ( **Drawing 2, [0016]-[0019], please note electrodes 112**

**(on each end) for the substrate 110 and electrodes 132 (on each end) for the substrate 130 as well )**

a plurality of lead-out terminals being connected to the electrodes through surrounding circuits extending to the peripheral edges of the first substrate and the second substrate, the lead-out terminals each being arranged on the opposing surfaces of the first substrate and the second substrate ( **Drawing 2, [0016]-[0019], shows peripheral terminals 114 (read as lead-out terminals) on the substrate 110 and terminals 134 on the substrate 130. Also please note the wiring connecting them to the terminals, notably circuit pattern 113 (read as surrounding circuits). Drawing 2 further shows that the terminals are arranged on opposing surfaces facing each other, so that they can be bonded together** ); but

Yukio does not explicitly teach of “a plurality of holding members that are in direct contact with at least one peripheral edge of the transparent first substrate so as to sandwich a periphery of the transparent first substrate, the holding member being formed of an electro-conductive material and arranged so that each holding member includes a portion inserted between the transparent first substrate and the second substrate and in contact with at least one respective lead-out terminal of either the first or second substrate.”

However, in the same field of endeavor, substrate structure, Takashi teaches of using conductive clips 13B (or 13/13A, depending on the drawing) to pinch (read as sandwiching by inserting a portion between the glass substrate 4. See the portion which can be construed as the base of the clip ), ( Takashi, Drawing 9, [0016]. Also please note they energize electrode lead groups 5 and 6

(read as being in contact with the lead-out terminal. Also please note the combination with Yukio for teaching of the terminals on both substrates, so it can be designed two ways). Drawing 1 shows a better view of the clip interacting with lead groups 5 and 6. Modifying Yukio would have these clips over the terminals 114 and 134, as similarly done by Takashi, over the notched region 142 to be able to press the terminals together, firmly in place.

Therefore, it would be obvious to one of ordinary skill in the art, at the time of the invention, to implement the conductive clips, as taught by Takashi, with Yukio's substrate device, with the motivation that by having the clips pinch the substrate, the thickness can become small, thus reducing size, better efficiency, and as a result, costs.

Yukio and Takashi teach in Claim 2:

The transparent touch panel according to claim 1, wherein the thickness of the portions of the holding members inserted between the transparent first substrate and the second substrate is 0.5 to 2 times the space between the transparent first substrate and the second substrate. ( **Respectfully, this is an optimization issue and according to KSR principles and case law, a design choice. One of ordinary skill in the art would realize to design the thickness so that the clip would be sufficient to fit around the substrate and to provide an adequate space between the two substrates. Please note that Yukio also has spacers to provide distancing between the two substrates, so it is an issue that is relevant to his invention as well that he seeks to address. Please note the combination to teach of the holding member, as taught by Takashi, for the same reasoning, to vary the thickness )**

Yukio and Takashi teach in Claim 3:

The transparent touch panel according to claim 1, comprising notched portions formed in a portion of the second substrate which is in contact with the holding members. ( **Yukio, Drawing 2, [0018] shows insert part 142, formed in the second substrate. Please note the combination with Takashi teaches to place the clips in this region, with regards to the terminals 114 and 134 )**

Yukio and Takashi teach in Claim 4:

The transparent touch panel according to claim 1, wherein the transparent first substrate has a plurality of groove portions in the surface opposite to the surface on which the transparent electro-conductive layer is formed, and the holding members are held in groove portions. ( **Respectfully, 3D molded substrates are well known in the art which can deform parts of the substrate and the combination of the two references teaches to use the clips to firmly press the substrate(s), so having a molded substrate in which the clips could form into would be obvious to one of ordinary skill in the art to allow for the clips to further press down and with the motivation that the clips would not come out easily and possibly damage the device entirely. Please note KSR principles such as known technique (substrates with recesses), obvious to try to yield predictable results (obvious to have to provide firm connection for the clips since finding a secure connection is an issue in the art for these clips) and simple substitution (having a molded substrate would not destroy Yukio) )**

Yukio teaches in Claim 5:

The transparent touch panel according to claim 1, wherein the transparent first substrate is a fixed substrate. ( **[0002] of the present invention, which discloses the Yukio invention, notes that 130 is a fixed substrate. Also please note [0017] of Yukio )**

Yukio and Takashi teach in Claim 6:

An electronic apparatus comprising the transparent touch panel of claim 1 and a display apparatus including electrically-conductive connecting terminals, the transparent touch panel being disposed on a display surface side of the display apparatus, and the holding members being in direct contact with the connecting terminals, whereby the apparatus and the lead-out terminals are electrically coupled. ( **Respectfully, it is obvious the transparent side is disposed on the display surface side of the touch panel, Drawing 2 of Yukio shows the terminals being electrically coupled by the circuit pattern 133 for receiving and sending display signals from the appropriate drivers and the combination with Takashi teaches to use the holding members with the terminals )**

Takashi teaches in Claim 8:

The transparent touch panel according to claim 1, wherein the holding member are U-shaped and an interior of the U overlaps the at least one peripheral edge of the transparent first substrate. ( **Takashi, Drawing 9, [0016], disclose the U-shaped holding member over the glass substrate 4 )**



Yukio and Takashi teach in Claim 9:

The electronic apparatus according to claim 6, wherein the holding members are U-shaped ( **Takashi, Drawing 9, shows the U-shaped holding member** ), an interior of the U overlaps the at least one peripheral edge of the transparent first substrate ( **Drawing 9 shows the interior around the glass substrate 4** ), and the connecting terminals are in direct contact with a leg of the U-shape. ( **The combination with Yukio teaches to place the holding members over the terminals 114/134** )

Takashi teaches in Claim 10:

The transparent touch panel according to claim 1, wherein the peripheral edge of the transparent first substrate is sandwiched between an upper-side surface and a lower-side surface of each holding member. ( **Takashi, Drawing 9, shows the glass substrate 4 sandwiched between the upper and lower surfaces of the clip 13B** )

Yukio and Takashi teach in Claim 11:

The transparent touch panel according to claim 3, wherein a warp of the notched portions generates pressing force between the movable substrate and the holding members. ( **Respectfully, the combination teaches to place the holding members over the terminals through the notched portions, please see Drawing 2 of Yukio and the 103 combination above. The clip is designed to press the substrates from both ends, obviously creating a pressing force** )

***Response to Arguments***

6. Applicant's arguments with respect to claim 1-11 have been considered but are respectfully moot in view of the new ground(s) of rejection.

In light of the new claim amendments, the old rejection has been removed and a new one has been given. Please note the Yukio reference is disclosed in the background of the current invention and a copy has also been provided with this Office Action. The Takashi reference is a prior art already on the record as well.

Due to the new rejection, Applicant's arguments are moot. Examiner apologizes for the unclear Action by the previous examiner, such as mistaken reference numerals, which reference teaches which limitations, etc, but hopefully those have been cleared up now. Takashi is cited to teach of the holding member and the Furuhashi reference has been removed from the rejection altogether. As for the terminals, the Noda reference has also been removed as the Yukio reference, as admitted by Applicant's background, teaches of the two sets of terminals on both substrates. The Nagahata reference has also been removed.

As for Applicant's amendments regarding the holding members, it seems to examiner that Takashi still teaches of these limitations. Please note that it is important to note that the rejection is a 103, so the teachings, and the combination, must be considered together. Takashi's clip is meant to be combined with Yukio's substrate, namely sandwich the substrate and it clearly has a portion to do so, which is a broad term.

Applicant is advised to overcome the current rejection by better claiming the clips and how they interact through the notched areas to the lead-out terminals. Yukio, combined with

Takashi, does not appear to teach of the process the same way that Applicant's invention does (please see Figures 4 and 6), so claiming this better would pass the case to allowance.

***Conclusion***

7. Applicant's amendments and non-persuasive arguments necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS P. JOSEPH whose telephone number is (571)270-1459. The examiner can normally be reached on Monday-Friday, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on 571-272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DJ

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